

RESPONSE TO COMMENTS

for

Tenative Resolution No. R9-2002-0097

Approving the Model Standard Urban Storm Water Mitigation Plan (SUSMP) For San Diego County, Port of San Diego, and Cities of San Diego County

San Diego Regional Water Quality Control Board
May 30, 2002

I. General Comments

1. Comment: We believe this Plan fails to comply with both Federal and State Clean Water Act laws and regulations. It does so by relying on the Regional Boards Order No. 2001-01 a permit we believe to be fatally flawed in its content and in the manner in which it was adopted. (BIA)

Response: The proposed Model SUSMP is in compliance with Order No. 2001-01, the San Diego Municipal Storm Water Permit (Permit). The San Diego Regional Water Quality Control Board (SDRWQCB) found the Permit to be in compliance with both the federal Clean Water Act and the state Porter Cologne Act when the Permit was adopted on February 21, 2001. The State Water Resources Control Board (SWRCB) upheld the SDRWQCB's decision in Order WQ 2001-15.

2. Comment: This Plan is one of the most complicated, inflexible, and costly local storm water regulations in the state of California. It will result in significant increases in the cost of housing, commercial, industrial and office buildings in San Diego County. This increase in cost, as stated previously by your staff, will have little or no significant impact on increasing the quality of urban runoff in San Diego County. This trade off should be unacceptable in a community where housing costs are well beyond the reach of the average potential homebuyer or small business owner in San Diego County. (BIA)

Response: The cost of meeting the SUSMP requirements was addressed by both the SDRWQCB during adoption of the Permit and the SWRCB during adoption of Order WQ 2000-15. In addition, the SWRCB has found the cost of implementing the SUSMP requirements to be reasonable, stating in Order WQ 2000-11 that a cost of one to two percent of total development cost "appears to be reasonable, especially in light of the amount of impervious surface already in Los Angeles County and the impacts on impaired water bodies. In considering the cost of compliance, it is also important to consider the costs of impairment. The beach closures in the Los Angeles region, well documented in the evidence, have reached critical proportions. These beach closures clearly have a financial impact on the area, and should be positively affected by the SUSMPs." These urban runoff problems of Los Angeles discussed by the SWRCB are common throughout Southern California, making the findings of the SWRCB pertinent to the San Diego area as well.

While it is important to remember that the SUSMP requirements are only one aspect of the Permit, it is expected that the SUSMP provisions will help improve water quality over the long-term. Many studies have found there to be a direct correlation between urbanization and water quality pollution. The SUSMP provisions would minimize the impacts resulting from the rapid urbanization of the region. The

administrative record for the Permit is replete with information on the effectiveness of BMPs in removing pollutants from urban runoff. In addition, as redevelopment occurs over time, runoff from areas which did not previously have BMPs would begin to receive treatment under the SUSMP requirements, resulting in further water quality improvements. This approach to management of urban runoff from new development is in line with the United States Environmental Protection Agency (USEPA) strategy, which proposes a similar approach in its Phase II storm water regulations for small cities. Of such an approach, USEPA states that “a permit for a regulated small MS4 operator implementing BMPs to satisfy the six minimum control measures [including control measures for new development] will be sufficiently stringent to protect water quality, including water quality standards.”¹

3. Comment: Perhaps the most under-reviewed aspect of the SUSMP is how it will really work. Your Board should know this before adopting these regulations. No analysis has been presented as to effectiveness or costs of these new requirements. Poway has examined how the SUSMP would affect some representative projects. We have found that the application of the treatment BMPs generally eliminates 5 percent of a development. For example, we recently opened a 102-unit, low-income senior apartment project. With the detention of the first 6/10ths of an inch of rainfall, a 5-foot-deep, 2,500-square-foot basin would have to be built, resulting in the loss of at least 4 dwelling units. After the runoff settles for 36 hours, the basin would be pumped out into the adjacent drainage channel. If an infiltration pond were designed, which would be superior from an operational standpoint, it would be 3/4ths of an acre in size and would eliminate approximately 30 dwelling units. This analysis does not consider if additional land area would be required for peak storm flow retention. (City of Poway)

Response: This comment appears targeted at the SUSMP requirements themselves, rather than the proposed modifications to the Model SUSMP, which are the current issue. The applicability, effectiveness, and cost of the SUSMP requirements have previously been addressed by both the SDRWQCB during adoption of the Permit and the SWRCB during adoption of Order WQ 2000-15. In addition, the SWRCB has found the costs of implementing the SUSMP requirements to be reasonable in Order WQ 2000-11 (discussed in more detail above). It is also important to note that the Model SUSMP allows for various best management practices (BMPs) to be considered for use. Many BMPs are less land intensive than the detention basins or infiltration ponds discussed by the commentor. For example, the Model SUSMP allows the use of BMPs which are flow-based, such as swales or sand filters. These BMPs are only required to treat the runoff generated by an hourly rainfall intensity of 0.2-inch per hour, allowing them to use limited land area, or even be constructed underground.

4. Comment: The Sierra Club has reviewed the Tentative Resolution No. R9- 2002-0097 and the Staff report in Reference (1). We concur with the staff's proposed modifications to the Model Standard SUSMP. These modifications are necessary to ensure that the Model Standard SUMP complies with Order No. 2001-01, NPDES CAS018758, the San Diego Municipal Storm Water permit. Therefore, we urge you to adopt the Tentative Resolution No. R9-2002-0097 and the proposed modifications. (Sierra Club)

Response: Comment noted.

5. Comment: The County has carefully considered RWQCB staff's comments on the model SUSMP, and has concluded that the model SUSMP as submitted meets the requirements of the Permit. (County of San Diego)

¹ 64 FR 68753

Response: Staff findings on the compliance of the Copermittee's Model SUSMP with the Permit's SUSMP requirements are found in the Staff Report for Tentative Resolution No. R9-2002-0097.

II. Receiving Waters Definition Comments

1. Comment: The Regional Board seeks to define Receiving Waters (Page 6 of 39 Final Model SUSMP as Modified by Regional Board Staff) to include any kind of dry gully or natural flow path that would have water in it only when it rains (ephemeral streams). This all-encompassing definition would, it seem, lead to "preservation" of such gullies as the next step. Currently, the replacement of these ephemeral streams by underground systems is allowable and, indeed most often necessary for development to occur, whether it is for a road crossing or other form of land development. The irony of the Regional Board's position is that, while these ephemeral streams can be eliminated and replaced with underground drainage conduit, one cannot alter an ephemeral stream for enhancing the quality of or treating storm water. The logical conclusion is that the elimination of gullies in the course of developing land will require mitigation or some "compensation." (BIA)

Response: The issue of preservation and/or filling of ephemeral streams is addressed outside of the municipal storm water program. The SDRWQCB regulates the alteration of ephemeral streams through either the issuance of 401 Water Quality Certifications or Waste Discharge Requirements. Depending on project conditions, ephemeral streams are often required to be preserved. In other situations, mitigation for the filling of streams is often required. In both cases, the discharge of polluted runoff to preserved or mitigated ephemeral streams is not allowed. The Model SUSMP definition of Receiving Waters is consistent with this approach.

2. Comment: Currently, as modified by your staff, the definition for 'receiving waters' does not work. For example, as modified, it precludes the use of natural treatment options, like riparian habitat creation and grass swales, and forces projects to select mechanical devices to meet the project's treatment requirements. RWQCB staff proposes that Receiving Waters must include all wetlands as determined using the Army Corps of Engineers and U.S. EPA definition of wetlands. For SUSMP program purposes, any "natural BMP" that is identified as a wetland and therefore as a "receiving water" is no longer a BMP. But it is neither illegal nor inappropriate to discharge stormwater to a wetland, particularly a wetland constructed or enhanced for that purpose. RWQCB staff appears to be hostile to the use of constructed or enhanced wetlands (or other natural BMPs) to clean storm water. That hostility is evidenced again in staff's proposed changes to the model SUSMP. The copermittees will be unable to encourage the use of natural BMPs if there is any risk that such BMPs will be reclassified as "receiving waters" for SUSMP purposes. No one will build a wetland or a pond to treat stormwater, if the wetland is not defined to be and cannot be managed as a BMP. This is a classification issue that the copermittees, as the land use authorities approving these projects and imposing these conditions, must control. (City of San Diego, County of San Diego, City of Carlsbad)

Response: The modified definition of Receiving Waters does not preclude the use of constructed "natural" BMPs. Rather than be "hostile" to the use of constructed "natural" BMPs, the Permit promotes the use of "natural" BMPs at Finding 11, and the modified definition of Receiving Waters is consistent with that approach. The modified definition does not propose to reclassify "natural" BMPs as receiving waters, as the commentators assert. In fact, the definition takes steps to ensure that just such a situation does not happen, when it states "constructed wetlands are not considered wetlands under this definition."

Moreover, the federal NPDES definition of wetlands at 40 CFR 122.2 states “waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA [...] are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States.”

However, to further ensure that “natural” BMPs are not re-designated as receiving waters after construction, the definition of Receiving Waters in the Model SUSMP will be further modified to make clear that constructed “natural” BMPs are not receiving waters.

See change at Model SUSMP page 6.

3. Comment: We would like to work with your staff to develop a working definition for ‘receiving waters.’ This definition is of critical importance as it sets the framework for implementing the SUSMP’s requirements, determining appropriate storm water best management practices types and locations, and determining what areas are to be protected. Unfortunately, neither federal or state statutes nor the Municipal Permit have defined the term. Because of the complexity of this definition and the lack of guidance in existing regulatory documents, we believe there needs to be cooperation and collaboration to develop a definition that works. We feel that the definition of ‘receiving waters’ submitted collectively by the copermittees is legally adequate for the SUSMP. It reaches all surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems. We therefore request that the Regional Board adopt the definition as it was proposed by the copermittees. We also feel that should the Regional Board choose not to adopt the copermittee’s definition for ‘receiving waters,’ sufficient controversy over your staff’s proposed changes to the copermittee’s definition exists to warrant further review. We feel that a definition of this importance should be cooperatively developed with the copermittees, technical experts, and your staff so that a definition could be developed for future Regional Board consideration. (City of San Diego)

Response: As discussed in the Staff Report, the Copermittees’ proposed definition of receiving waters was determined to be inadequate for its failure to address intermittent and ephemeral streams – a significant water resource within the San Diego Region. The definition was therefore modified to ensure that intermittent and ephemeral streams were addressed by the Model SUSMP. This modification is required by both the Permit and the Basin Plan. The Permit includes streams as a component of receiving waters at Finding 3, which states: “receiving waters, such as streams, lakes, lagoons, bays, and the ocean.” Moreover, at section F.1.b.2.b.xii, the Permit requires BMPs to be implemented “prior to discharging into receiving waters supporting beneficial uses.” The Basin Plan makes clear that ephemeral streams certainly are receiving waters which do support beneficial uses. The Basin Plan makes no distinction between ephemeral, intermittent, or perennial streams. In its discussion of “inland surface waters,” the Basin Plan states “although most free flowing streams in the Region are essentially interrupted in character having both perennial and ephemeral components, several beneficial uses, including aesthetic enjoyment and habitats for fish and wildlife, are made of these surface waters.”² Since the Basin Plan finds ephemeral streams to be surface waters which support beneficial uses, it is appropriate for the Model SUSMP’s definition of receiving waters to include ephemeral streams as a component of receiving waters.

It is worth noting that the SDRWQCB notified the Copermittees of its concern regarding the Model SUSMP’s definition of Receiving Waters in its December 10, 2001 letter. One purpose of the letter was

² San Diego Regional Water Quality Control Board, 1994. Water Quality Control Plan for the San Diego Basin. Pg. 2-9.

to allow for discussion of the Model SUSMP's contents prior to its submittal to the SDRWQCB. The period from December 10, 2001 to February 21, 2002, prior to Model SUSMP submittal, would have been an opportune time to further discuss the definition of Receiving Waters.

4. Comment: RWQCB staff proposes to require addition of the phrase "streams (perennial, intermitted, and ephemeral)" to the definition of "Receiving Waters" for SUSMP purposes. This proposed change is not acceptable to the County. The definition of "Receiving Water" submitted in the model SUSMP should not be changed.

RWQCB staff justifies this proposed change as being necessary to ensure protection of a significant water resource. However, the SUSMP program is a special and more stringent program addressed to a limited set of development activities, not a "core" Clean Water Act or California Water Code program. The fundamental issue here is not protection of water resources, but flexibility in the local implementation of this particular RWQCB-mandated (but not RWQCB implemented) land use regulatory program. Within this special context, the definition of "receiving waters" has a special and limited function: it helps to define where SUSMP-mandated BMPs can be located. That issue was contentious during public review of this Permit. RWQCB staff proposed that such BMPs always be located on the development site, but staff ultimately got far less than they had sought on this issue. Staff's proposal to insert this phrase into the model SUSMP appears to the copermitees to be an attempt by RWQCB staff to use the model SUSMP to rewrite the Permit.

The copermitee submission meets the requirements of the permit. RWQCB staff propose a revised definition of "Receiving Waters" and asserts that this revision would be "more consistent" with the Permit. But the Permit does not define "Receiving Waters," so there is no basis for staff's implicit assertion that the copermitees definition of Receiving Water is not consistent with the Permit. (It is worth noting however that the change demanded by staff would reach beyond the scope of "Waters of the United States" as defined in the federal regulation that is quoted in the Permit. That regulation (40 CFR 122.2) purports to reach "intermittent streams," but does not explicitly extend to the "ephemeral" streams that RWQCB staff now asserts must be included in this model SUSMP definition. The federal definition also reaches "tributaries," but does not define ephemeral streams as "tributaries" concerning BMP location. If RWQCB staff are now allowed to insist instead that all "ephemeral streams" are "Receiving Waters" for SUSMP purposes, this fundamental compromise would be nullified. That kind of reversal would not be "more consistent" with the underlying Permit, even if it would be more consistent with what RWQCB staff initially proposed be included in the Permit.) Staff's comment appears to be based on the goals of federal and state clean water programs. But federal and state laws do not require that SUSMP programs be implemented in a particular manner. SUSMP programs go well beyond any federal or state statutory requirement, and beyond the Basin Plan. As a legal matter this program need not be applied to all Waters of the United States, all Waters of the State, or all "Receiving Waters," however those terms are defined. Therefore, the model SUSMP can properly employ a definition of Receiving Waters for SUSMP purposes that embodies political decisions or compromises about how far this program should go, and how it should be shaped.

The copermitee's definition of Receiving Waters for SUSMP purposes embodies this kind of programmatic decision. It reaches all surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems. The definition stops short of reaching all "streams" that RWQCB staff would like to classify as Waters of the United States.' But as noted above, the SUSMP program is an add-on program that need not address all projects or activities, or all waters. The copermitee's definition of Receiving Waters is therefore is both reasonable, and legally adequate. RWQCB Staff's proposed amendment to this definition, read in the context of the draft Staff Report discussion, would impose staff's preferred programmatic resolutions of significant issues that were

controversial when the Permit was proposed. Those issues were differently resolved in response to comments submitted at that time. In particular, the Tentative Order was amended following vigorous debate over whether the Permit should require that SUSMP BMPs be implemented only on the development project site (staff's position), or should also be allowed to be implemented on a regional or sub-regional basis (the position of the State Water Resources Control Board and many others). The Permit now requires that such BMPs "be implemented close to pollutant sources, when feasible, and prior to discharging into receiving water supporting beneficial uses."

To implement this compromise, a line must be drawn identifying the protected receiving waters, above which required BMPs must be located. That is the only function of the definition of "receiving waters" in the SUSMP: it defines the acceptable geography for locating BMPs. The copermittee's proposed definition of "receiving waters" draws this BMP locating line in a manner that is consistent with the compromise the Permit strikes. (County of San Diego, City of San Diego)

Response: By failing to include streams as a receiving water, the Copermittees' definition of Receiving Waters does not meet the requirements of the Permit. The Permit includes streams as a component of receiving waters at Finding 3, which states: "receiving waters, such as streams, lakes, lagoons, bays, and the ocean." Moreover, at section F.1.b.2.b.xiii, the Permit requires BMPs to be implemented "prior to discharging into receiving waters supporting beneficial uses." The Basin Plan makes clear that ephemeral streams certainly are receiving waters which do support beneficial uses. In addition, the Basin Plan makes no distinction between ephemeral, intermittent, or perennial streams. In its discussion of "inland surface waters," the Basin Plan states "although most free flowing streams in the Region are essentially interrupted in character having both perennial and ephemeral components, several beneficial uses, including aesthetic enjoyment and habitats for fish and wildlife, are made of these surface waters."³ Since the Basin Plan finds ephemeral streams to be surface waters which support beneficial uses, it is necessary for the Model SUSMP's definition of Receiving Waters to include ephemeral streams as a component of receiving waters. For this reason, the Model SUSMP definition of Receiving Waters was modified.

This modification of the definition of Receiving Waters does not prevent the implementation of offsite BMPs; nor is it an attempt to rewrite the Permit to restrict BMP implementation on site. It is presumptuous of the commentor to suggest that staff seeks to rewrite the Permit. Staff recommended adoption of the Permit on February 21, 2001, and stands by its requirements today. Offsite BMPs, often called "regional solutions," are still allowed by the Permit, provided they are implemented prior to discharge to receiving waters. This is not a new concept being introduced here for the first time in the Model SUSMP; rather, it is a clear requirement of the Permit at section F.1.b.2.b.xiii. In fact, staff is currently participating in a "regional solution" being developed by the Centre City Development Corporation and the Port of San Diego for the downtown area. The "regional solution" proposes offsite implementation of BMPs prior to discharge to receiving waters. Neither the Permit or the proposed definition of Receiving Waters prevents this "regional solution" from being implemented as it was initially proposed.

Moreover, the modification to the definition of Receiving Waters does not remove the Copermittees' discretion when requiring BMP implementation. If a Copermittee finds it infeasible to implement BMPs to protect ephemeral streams for a project or portion of a project, the Permit and Model SUSMP provide the Copermittee with the discretion to issue a waiver from structural treatment BMP implementation on a case-by-case basis. In such a situation, the Copermittee would also have discretion to require restoration and enhancement of the receiving ephemeral stream if it were degraded, in order to facilitate urban runoff polishing.

³ San Diego Regional Water Quality Control Board, 1994. Water Quality Control Plan for the San Diego Basin. Pg. 2-9.

Finally, inclusion of ephemeral streams in the definition of Receiving Waters does not extend the application of receiving waters to every indentation in the land which may convey water. Ephemeral streams exhibit a bed and bank and an ordinary high water mark. Again, the Copermittees may exercise their discretion in determining when bed and bank or ordinary high water marks are present.

5. Comment: The copermittee submission meets the requirements of the permit. There is no requirement in federal or state law that SUSMP programs be implemented to protect all federal jurisdictional wetlands. Therefore, SUSMP programs can legally do less than this. There is also no requirement in the Permit that federal jurisdictional wetlands be defined as receiving waters. Therefore, compliance with the permit does not require that the model SUSMP definition of Receiving Waters be amended. The definition of Receiving Waters submitted in the model SUSMP should not be changed. (County of San Diego)

Response: The inclusion of federal jurisdictional wetlands as receiving waters in the Model SUSMP is not an attempt to “protect all federal jurisdictional wetlands;” rather, it is an attempt to ensure that pollutants in urban runoff discharges to wetlands have been reduced to the maximum extent practicable. Federal jurisdictional wetlands are both waters of the United States and waters of the State. It is also clear that they support beneficial uses. As such, the Permit must address urban runoff discharges into these waters. The Model SUSMP implements the Permit. Therefore, the proposed Model SUSMP finds jurisdictional wetlands to be receiving waters.

6. Comment: They also propose that any wetland constructed as mitigation for habitat loss be classified as Receiving Water. Whether wetlands still serve habitat loss mitigation purposes is not a concern that is within the regulatory jurisdiction of the RWQCB. The County and copermittees recognize that some projects may discharge some pollutants that would not be adequately treated in a constructed wetland. Some pretreatment of storm water may be needed in these cases, before storm water is discharged to a constructed mitigation wetland. But the treatment needed will vary based upon the project, the other BMPs in place, the pollutant of concern, the design and size of the constructed wetland, the habitat issues if any affecting a particular project. Therefore, decisions concerning pretreatment should be made on a project-by-project basis, not across-the-board in the SUSMP Model as proposed. Within a project design there may be circumstances, as there are in nature, where pollution protection and habitat mitigation can coexist, and the model SUSMP should not preclude dealing with those situations.

The copermittee submission meets the requirements of the Permit. The RWQCB staff proposal exceeds the authority of the RWQCB. With this proposed change, RWQCB staff proposes not to acknowledge that a constructed wetland is a BMP, if that wetland also receives credit from a resources agency for habitat loss mitigation purposes. The Permit contains no such restriction. Moreover, it is neither illegal nor inappropriate to discharge stormwater to a wetland, particularly a wetland constructed or enhanced for that purpose. Such discharges will in most cases also not be inconsistent with the habitat loss mitigation purposes the wetland may also serve. Finally, whether such wetlands still serve habitat loss mitigation purposes is not a concern that is within the regulatory jurisdiction of the RWQCB. (County of San Diego)

Response: Mitigation wetlands are constructed to compensate for destruction of wetlands elsewhere. Essentially, mitigation wetlands are the creation of waters of the United States, designed to offset the loss of other waters of the United States. They therefore must be treated in the same manner with which the wetland they are replacing would be treated. Just as it would be inappropriate to discharge polluted runoff to a natural wetland, it is inappropriate to discharge polluted runoff to a mitigation wetland constructed to offset the loss of a natural wetland. Without mitigation wetlands receiving equal treatment

as natural wetlands, mitigation wetlands cannot be expected to achieve their purpose – replacement of a lost natural wetland. As waters of the United States which support beneficial uses, mitigation wetlands must be protected by the Permit. The Model SUSMP implements the Permit. Therefore, the proposed Model SUSMP finds mitigation wetlands to be receiving waters.

III. Other Definitions Comments

1. Comment: Page 5, Definition of Commercial Development - The copermittee submission meets the requirements of the permit, even though it does not include the same list of examples as the Permit. (County of San Diego)

Response: This definition was changed to make it consistent with the Permit. Where the Permit provides a definition for a term, the Model SUSMP definition should match the Permit definition, since the Model SUSMP implements the Permit.

2. Comment: Page 7, Definition of Storm Water Conveyance System - The copermittee submission meets the requirements of the permit, even though it does not include the same list of examples as the Permit. (County of San Diego)

Response: This definition was changed to make it consistent with the Permit. Where the Permit provides a definition for a term, the Model SUSMP definition should match the Permit definition, since the Model SUSMP implements the Permit.

IV. Site Design Storm Water Treatment Credits Comments

1. Comment: Section F.1b.(2)(d) of the Permit provides that the copermittees may develop "as part of the model SUSMP" equivalent methods for calculating the volume or flow of storm water required to be mitigated using post-construction BMPs. Based on this provision, the County researched programs in use in other jurisdictions, and identified key features of a Site Design Storm Water Treatment Credits program it intended to further refine and implement. The copermittees endorsed this concept and included language in the model SUSMP that would allow this program to be further developed and submitted for Regional Board review and approval at a future date.

RWQCB staff proposes to eliminate this language, and thereby to eliminate any realistic possibility that a program of this kind could be proposed, approved, and implemented in the future. Our understanding is that this deletion is not based on staff concerns about the substance of this program, but instead is purely a response to the inability of the County to fully define and describe this program in time to include more detail in the model SUSMP itself.

The Storm Water Credits program is needed to allow the County and other copermittees to make good use of standard land development planning and regulatory tools. For many development projects, storm water quality can be better protected through low impact project design than by imposing additional post-construction BMP requirements on a more intense project. This is particularly true in rural area with large lots, and for rural projects that can be designed to preserve natural areas. The proposed program will allow the copermittees to "marry" their SUSMP stormwater efforts to existing environmental and

infrastructure programs already associated with land development. This joining would help copermittees to transition their storm water programs from an add-on burden, to an accepted consideration to be integrated into basic project design. In discussing this program with RWQCB staff, the County formed the impression that staff is not opposed to this program in concept, but wants to ensure adequate public review of any such program. Since the primary concern is public review of any such "credit" program before it is implemented, we propose that this provision be retained with modifications to more clearly ensure such review. Specifically, the first sentence of this section should read:

The Copermittees agree that any Copermittee may develop and submit for public review and comment and Regional Board approval a Site Design Storm Water Treatment Credits program that allows reductions in the volume or flow of storm water that must be captured or treated on a project in return for the inclusion of specified project design features in the project, and further agree that any such submittal shall be deemed to be a part of this Model SUSMP jointly submitted to the Regional Board for review and approval

The copermittee submission meets the requirements of the permit. Section F.1.b.(2)(d) of the Permit provides that the copermittees may develop "as part of the model SUSMP" equivalent methods for calculating the volume or flow of storm water required to be mitigated using post-construction BMPs. The model SUSMP proposed to keep this door open for a supplemental "Site Design Storm Water Treatment Credits" plan that would be submitted for Regional Board review and approval at a future date. The RWQCB has sufficient authority to provide that its later review and approval of a supplemental model program submission would make that approved submission a part of the model SUSMP. Therefore, deletion of this placeholder from the model SUSMP is not required to comply with the Permit. (BIA, County of San Diego, City of Poway, ASLA)

Response: To address Copermittee concerns, the wording in the proposed Model SUSMP has been modified to allow for the development of a site design storm water credit system. A single credit system is to be developed by the Copermittees or a Copermittee and submitted to the Regional Board for review and approval. Copermittees which want to utilize a credit system will then be allowed to implement that one system which has been submitted and approved. Use of the credit system would allow for site design BMP implementation to be used in order to reduce the runoff volumes and flow rates which a site would need to treat and control. However, the credit system would not allow for the removal of all structural treatment BMP requirements. Other states have developed storm water credit systems, including the Maryland Department of the Environment. Good examples of site design BMPs that could be included in a credit system include (1) disconnection of rooftop runoff from impervious surfaces, (2) stream buffers, and (3) natural area conservation. Some credit concepts used elsewhere which would not meet permit requirements include (1) credit for directing sheet flow from impervious areas like parking lots to pervious areas (inadequate treatment) and (2) credit for "environmentally sensitive development" (lack of structural treatment BMPs).

See change at Model SUSMP page 9.

V. Flexibility Comments

1. Comment: There appears to be a fundamental difference of opinion concerning what the "model" supposes to provide. In reviewing the model as prepared and submitted by the local agencies, their goal was to provide a common foundational document that reduces pollutants and runoff flows from priority projects. The model is then to be used by each agency to go the rest of the way fulfilling all permit

requirements for their own jurisdiction. On the other hand, your staff appears to be of the opinion that this model alone must fulfill all permit requirements. That position seems contrary to both the permit and normal logic since this model does not have any adopted code or law to make it actually apply to real world projects. Most of the staff comments would be appropriate for the local SUSMPs that are to be prepared after this model is approved.

Based upon the experience of the Copermittees as land use regulators, the proposed Model SUSMP contains some flexibility, as a "model" should, for each jurisdiction to tailor their focal SUSMPs to their local circumstances and to individual properties. We do not propose flexibility as to whether or not NPDES goals are achieved. The Copermittees seek flexibility as to how to achieve these goals. Unfortunately, the SUSMP recommended by your staff is not the "model" prepared by the Copermittees. Your staff recommends that all flexibility be taken out of the Model SUSMP. As an example, staff recommendations are based upon an assumption that only expressly stated methods of compliance may be used. This narrow view eliminates flexibility needed to successfully achieve the goals of the Permit. Regulations, such as the changes recommended by your staff that limit flexibility in achieving storm water pollution standards, will also limit the achievement of other vital regional goals. You must consider the unintended, as well as the intended, effects of each regulation you adopt. You must give the implementation of these regulations as much flexibility as you possibly can if both NPDES and Smart Growth goals are to be achieved.

In reviewing the proposed Tentative Resolution *R9-2002-0097*, it was disappointing to learn that the Board's staff continues to implement a program that *focuses* on prescriptive remedies that divert attention from the most cost effective approach to clean the region's waters. The programs currently being implemented are costly to both the public and private organizations within the county. We all have an obligation to insure that we reach our mutual goal of the beneficial uses of the counties receiving waters at the least cost possible. (ASLA, City of Poway, City of Carlsbad)

Response: The Model SUSMP is a minimum framework from which the Copermittees can develop their own local SUSMPs. Modifications were made by staff to ensure that the Model SUSMP was both compliant and consistent with Permit requirements. Neither the Model SUSMP nor the Permit restricts the ability of the Copermittees to develop the local SUSMP to address local priorities or issues, provided that minimum Permit requirements are met. In response to Copermittee requests for increased flexibility, staff has revised wording in the Site Design Storm Water Treatment Credit, Alternative Methods for Achieving Treatment Requirements, and Establish Storm Water BMPs sections of the proposed Model SUSMP.

VI. Alternative Methods for Achieving Treatment Requirements Comments

1. Comment: The City of San Diego, together with San Diego BayKeeper, national water quality experts, the American Public Works Association, and your staff, developed a concept that could allow for more efficient storm water treatment, and provide water quality improvements in urbanized areas more quickly. We believe this concept, which we have termed the Localized Equivalent Area Drainage, or "LEAD method," could be an equitable, environmentally sound process for transferring the SUSMP's treatment requirements from legally defined areas (parcels) to hydrologically defined areas (sub-drainages) to achieve greater efficiencies and amounts of pollutant removal, principally because "urban runoff does not recognize [human made] boundaries" (Municipal Permit, Finding No. 30, page 7 of 52). As we envision the LEAD method, the LEAD method could be applicable to infill development and redevelopment projects located in urbanized areas of the City of San Diego.

We believe the LEAD method could bring the region clean water much faster, more efficiently, and at less cost. In some urbanized areas, the LEAD method may provide an alternative that is superior to application of SUSMP treatment requirements at the parcel level because it:

- Promotes a more efficient, integrated watershed-based treatment by treating entire subdrainages once, like pieces of a puzzle.
- Provides for accelerated water quality benefits through advanced treatment of sub-drainages, which would be funded by future redevelopment.
- Provides greater assurance of proper operation & maintenance by shifting responsibility to the City and reducing the number of structural devices.
- Maintains the SUSMP's source control and proper site design requirements in the original project's footprint.
- Most importantly, could more effectively achieve the overarching goal of the Municipal Permit - providing clean water to the maximum extent practicable.

The City of San Diego's Storm Water Pollution Prevention Program, San Diego BayKeeper, and the American Public Works Association request the Regional Board's approval of the "Alternative Methods for Achieving Treatment Requirements" section in the Model SUSMP to allow the development of a pilot program to implement the LEAD method within the City of San Diego. We expect that the pilot program will provide a valuable blueprint for effective regional solutions to protect and restore our waters without relying on "end of pipe" treatment. We envision that the pilot program could be collaboratively developed with your staff and water quality experts, with the requirement for Regional Board approval prior to program implementation. If successfully developed and approved, we could implement one or several appropriate projects within the City of San Diego prior to the next Municipal Permit cycle. With this timeline in mind, we could implement a monitoring program as part of the pilot study that would include up to three annual reports and management recommendations prior to the issuance of the next Municipal Permit, so that the findings of this pilot study could be included in the next permit, if appropriate. (City of San Diego)

Response: As discussed in the Staff Report, the Alternative Methods for Achieving Treatment Requirements section is not in compliance with the Permit. Essentially, the section would allow a proposed project to conduct "offsite mitigation" of urban runoff impacts resulting from a project, rather than requiring the project to treat the urban runoff it generates. For example, under this section of the Model SUSMP, a project could choose to treat urban runoff from a nearby existing site, while allowing urban runoff from the proposed project to be discharged untreated. Sections F.1.b.2 and F.1.b.2.b of the Permit do not provide for such an approach. These Permit sections require that proposed projects implement structural treatment BMPs to reduce pollutants and control flows specifically generated by the proposed project. Section F.1.b.2 states that the Model SUSMP must "reduce pollutants and runoff flows from all new development and significant redevelopment projects." It is worth noting that the Alternative Methods for Achieving Treatment Requirements section is not necessary for the Model SUSMP to support so-called "regional solutions." Off site BMPs are still allowed, provided that they treat the runoff generated by the project for which they are constructed.

However, in response to comments, wording has been added to this section to allow for alternative methods of treatment to be considered when a waiver of infeasibility has been granted for a project. The City of San Diego could implement their LEAD pilot program for these waiver projects to assess effectiveness of the method. This type of pilot program could then provide useful information for the development of the next Permit.

See change at Model SUSMP pages 9-10.

2. *Comment:* Specifically, the Copermittees recommend that each jurisdiction be given the opportunity to propose Alternative Methods for Achieving Treatment Requirements (Model SUSMP, Page 9: VI STORM WATER BMP SELECTION PROCEDURE) for the purpose "... to reduce pollutants and runoff flows from all new development and significant redevelopment projects ..." (Permit F.1.b.2). Contrary to the opinion of your staff, the Permit does not require that this reduction be implemented on each individual project site. If an equal amount of runoff and pollutants were captured at another location on the same drainage, the requirement of the Permit would be achieved. This type of flexibility can make the difference between a small project successfully going forward or becoming the victim of an unnecessarily burdensome regulation. (City of Poway, City of Carlsbad, ASLA)

Response: As discussed in the Staff Report, the Alternative Methods for Achieving Treatment Requirements is not in compliance with the Permit. Essentially, the section would allow a proposed project to conduct "offsite mitigation" of urban runoff impacts resulting from a project, rather than requiring the project to treat the urban runoff it generates. For example, under this section of the Model SUSMP, a project could choose to treat urban runoff from a nearby existing site, while allowing urban runoff from the proposed project to be discharged untreated. Sections F.1.b.2 and F.1.b.2.b of the Permit do not provide for such an approach. These Permit sections require that proposed projects implement structural treatment BMPs to reduce pollutants and control flows specifically generated by the proposed project. Section F.1.b.2 states that the Model SUSMP must "reduce pollutants and runoff flows from all new development and significant redevelopment projects."

In addition, such an approach has not been adequately developed. Many uncertainties still exist, including: (1) Would the approach apply to both new development and redevelopment, or redevelopment only? By their very nature, most (if not all) new development projects should be able to treat their own urban runoff. It may be more appropriate to limit the approach to new development projects. (2) If implemented, would this approach preclude Copermittee use of the structural treatment BMP waiver provision found at Permit section F.1.b.2.h, since the approach would essentially make BMP implementation feasible for all projects? (3) What if the pollutants generated by the project and the "mitigation" site don't match? Would it be allowable for a project which primarily generates heavy metals to implement BMPs at a "mitigation" site which primarily generates nutrients? The approach could be problematic since it does not ensure that the most significant pollutants of concern are addressed. (4) How would maintenance of "mitigation" site BMPs be handled? Would the project proponent or the "mitigation" site owner be held responsible for BMP maintenance? Assuming the project proponent would be responsible for BMP maintenance, access issues could be significant. (5) How would the approach be administratively managed? If BMPs are to be implemented at a "mitigation" site, tracking of their construction and maintenance could prove challenging.

Therefore, the Alternative Methods for Achieving Treatment Requirements section of the Model SUSMP submitted by the Copermittees was not fully developed and not in compliance with the Permit. However, wording allowing the alternative methods for achieving treatment (such as the City of San Diego LEAD method) has been included in the Model SUSMP, provided a waiver of infeasibility has been granted for a project.

Finally, it is worth noting that the Alternative Methods for Achieving Treatment Requirements section is not necessary for the Model SUSMP to support so-called "regional solutions." Off site BMPs are allowed, provided that they treat the runoff generated by the project for which they are constructed.

See change at Model SUSMP pages 9-10.

3. Comment: The copermittee submission meets the requirements of the permit. The Permit does not require compliance with SUSMP requirements where a copermittees determines that would be "infeasible." If infeasibility waivers are granted, the Permit requires notice to the RWQCB, but does not require RWQCB approval. The Permit does not prohibit copermittees from requiring the use of offsite mitigation to reduce the environmental impacts of projects that receive "infeasibility" waivers.

The program proposed in this section of the model SUSMP meets the requirements of the Permit. RWQCB staff has perhaps presumed that this program would be applied by copermittees in situations where compliance with the basic SUSMP program was not "infeasible," but there is no basis in the model SUSMP for that presumption. Moreover, the proposed program provides for RWQCB approval before a proposed "alternative method" is implemented for a specific project. This aspect of this model program ensures the RWQCB will receive notice of infeasibility waivers as required by the Permit. It also goes beyond the requirements of the Permit, by providing for RWQCB approval.

This analysis does not address whether the application of this program to projects without a finding of infeasibility would also comply with the Permit. That questions need not be answered to conclude that as proposed, for model SUSMP purposes, this program meets the requirements of the Permit. It should also be noted that as proposed this program would leave the RWQCB in a position to reject bad projects. Finally, the County notes that it reserves its right to grant waivers to projects where appropriate under the Permit, and to notify the RWQCB of those waivers, without submitting for RWQCB for review and approval the alternative on-site or off site measures that might be required of such projects. (County of San Diego)

Response: As discussed above, the Alternative Methods for Achieving Treatment section of the Model SUSMP submitted by the Copermittees was not fully developed and is not in compliance with the Permit. However, in response to comments, wording allowing the alternative methods for achieving treatment (such as the City of San Diego LEAD method) has been included in the Model SUSMP, provided a waiver of infeasibility has been granted for a project.

See change at Model SUSMP pages 9-10.

VII. Establish Storm Water BMPs Comments

1. Comment: It is questionable that the efficiency/performance rankings of the "Treatment Control BMP Categories" shown in Table 3 of the Plan are valid. (See page 20 of 39 of the Final Model SUSMP, 2/14/02.) NAHB has just finished the second edition of a study of existing literature to determine the Best Available Technology to remove the pollutants (sediment, nutrients, and oil and grease) associated with storm water runoff from construction sites. (This study was undertaken as part of NAHB's strategy to influence the outcome of the Effluent Limitation Guidelines for the Construction and Development Industry regulation being developed by the US Environmental Protection Agency.)

The second edition greatly expanded the research base of the first study and included a review of over 230 references, of which 101 were judged as useable for this study. The final revisions to the second edition report are being clone at this time, but the conclusions are clear and are consistent with an earlier study completed by NAHB in September 2000, The major findings of the study include the conclusions below.

"The results of this report are based on a comprehensive survey of the available body of knowledge representing quantitative evaluations of BMP performance. The results of this project indicated that there is inconclusive evidence that any one BMP consistently outperforms others for most pollutants of concern assessed. Furthermore, the extent to which BMP performance is influenced by associated design features or watershed characteristics could not consistently be established." Erosion and Sediment Control Best Management Practices (BMPs) Research Report: Second Edition, 2002, prepared for National Association of Home Builders, Washington, DC, by PB5&J, Beltsville, MD. p. DRAFT-67.

The following series of figures will illustrate these conclusions. Each figure is a series of box plots, a statistical method that was used to compare the removal efficiencies of a specific 2 pollutant by BMP types. In the box plots, the range, the median, and inter-quartile range are shown. In this simple statistical method, if the inter-quartile range overlaps, it is assumed that there is no difference in removal efficiencies.

NAHB's study clearly demonstrates that it is inappropriate to rate the removal efficiencies by BMP types (called BMP categories in the Plan). Thus, the Co-Permittees were correct in not limiting the requirements of the Plan to the use BMPs with "H" or "M" efficiencies only. Instead the Plan should be continue to allow the use of all of the BMP categories shown in Table 3 of the Plan (see page 20 of 39, Final Model SUSMP), and the selection of BMP categories should be left up to the individual site planner. (BIA)

Response: The BMP effectiveness rankings in Table 3 of the Model SUSMP were developed by the Copermittees. While discretion for determination of the rankings has been left to the Copermittees, the BMP effectiveness rankings are consistent with data compiled by USEPA and other storm water programs, and are therefore appropriate. USEPA finds BMP effectiveness to vary between BMPs and targeted pollutants.⁴ The State of Washington identifies particular BMPs to be used for particular pollutant generating land uses.⁵ Preliminary findings of Caltrans BMP studies have also found that specific BMPs are more effective than others for removing various pollutants from urban runoff.⁶ Moreover, the Model SUSMP allows for Table 3 to be updated by the Copermittees as more information on BMP effectiveness becomes available.

The proposed Model SUSMP does not allow for implementation of any BMP without an assessment of BMP effectiveness, because such an approach is not in compliance with the Permit's maximum extent practicable (MEP) standard. BMPs need to remove pollutants in urban runoff to the MEP. The definition of MEP in the Permit, taken from a SWRCB memo on the subject,⁷ states "reducing pollutants to the MEP means **choosing effective BMPs**, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive" (emphasis added). Implementing effective BMPs is therefore required by the Permit, and the proposed Model SUSMP reflects this requirement.

While the proposed Model SUSMP will continue to require implementation of effective BMPs, the proposed Model SUSMP has been changed to provide the Copermittees with more control over implementation of their local SUSMP programs. Specific detail previously added to the Model SUSMP by the SDRWQCB regarding determination of effective BMPs has been removed, with the understanding

⁴ USEPA, 1999. Preliminary Data Summary of Urban Storm Water Best Management Practices. EPA-821-R-99-012. Pg. 5-54.

⁵ Washington State Department of Ecology, 2000. Stormwater Management Manual for Western Washington – Volume I Minimum Technical Requirements. Pg. 76-77.

⁶ Mike Barret, 2001. Presentation at Caltrans Storm Water Treatment Technologies Workshop, December 6, 2001.

⁷ State Water Resources Control Board, 1993. Memorandum: Definition of Maximum Extent Practicable.

that the Model SUSMP is a regional document, and that each Copermittee's local SUSMP and planning review process will include more detail as to how effective BMPs are identified and implemented.

See changes at Model SUSMP pages 17-18.

2. *Comment:* The Copermittees also proposed language to provide some local discretion in the selection of BMPs whenever the Permit does not expressly require a particular BMP. Such discretion is necessary for the delegation of authority to local jurisdictions in order for them to implement SUSMPs and Permit requirements. In a discussion with Board staff subsequent to the staff report and recommendations, Board staff agreed to the language proposed by the Copermittees with the following additions:

VI. STORM WATER BMP SELECTION PROCEDURE (page 9). "...shall be considered and implemented where expressly required by the Permit and if not so required where determined applicable and feasible by the Copermittee."

VI. 2. ESTABLISH STORM WATER BMPs (page 17). "... shall consider, and incorporate and implement where expressly required by the Permit and if not so required where determined applicable and feasible by the Copermittee."

The copermittee submission meets the requirements of the Permit. The model SUSMP provides in several places that BMPs are to be required for priority projects *"where determined applicable and feasible by the Copermittee."* RWQCB staff proposes to delete this qualifying phrase. This proposed deletion is unacceptable to the County. The Permit mandates that the copermittees require priority development projects to implement effective BMPs, unless it is infeasible to do so. The model SUSMP is also clear on this point, e.g. by stating at page 17 that "priority projects must implement source control BMPs, and must implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. BMPs must also achieve certain performance standards set out in the municipal permit section F.2.(b)(I to XIV)." Staff's proposed deletion of the qualifying phrase "where determined applicable and feasible by the Copermittee" suggests that staff believes there are circumstances in which copermittees are obliged to require BMPs that are inapplicable, or infeasible. However, the Permit does not require such actions by copermittees. Therefore, this language need not be deleted to comply with the Permit. (City of Poway, County of San Diego)

Response: The subject phrase was removed from the Model SUSMP due to its overarching nature, which implied that **all** of the BMP requirements of the Model SUSMP were subject to the Copermittees' discretion. This implication was problematic, since the Permit contains Model SUSMP provisions that are expressly required for all projects. While the Copermittees certainly have discretion in implementing many aspects of the Model SUSMP, it is misleading to include such a statement up front in the document, where it would essentially apply to the entire Model SUSMP. The phrase suggested by the City of Poway and the County of San Diego addresses these concerns, and the proposed Model SUSMP will be modified to include the phrase.

See change at Model SUSMP pages 9 and 16.

3. *Comment:* We are hereby serving notice that we are in dispute and in disagreement with the modification, on page 20 of 39, Table 3., Treatment Control BMP Selection Matrix: category: Drainage Inserts, of the Model Standard Urban Storm Water Mitigation Plan. (Final Model SUSMP). Drainage Inserts can have a Medium to High level removal efficiency rate for trash and debris, sediments, hydrocarbons, oil and greases.

Upon reading over the modifications of the Model SUSUMP provided by the SDRWQCB, Bio Clean Environmental Services, Inc. wishes the SDRWQCB to reconsider the modification on Table 3, which identifies the BMPs most effective for various pollutants. The original, Table 3., Treatment Control BMP Selection Matrix, (page 17 of 36 of the City of San Diego Storm Water Program, Final Draft 11-19-01) rates Drainage Inserts as low and medium efficiency. The modified Table 3., Page 20 of the Final Model SUSMP, dated 2/14/02, changes the rates of the Drainage Inserts to a general overall low efficiency. This was the only Treatment Control BMP Category to be modified. This may have been concluded upon the study of other types of inserts, however, the data we have collected contradicts such an evaluation.

Bio Clean Environmental Service, Inc. the exclusive dealer of Suntree Technologies, Inc. stormwater filtration systems, notes the modification of Table 3., in the category of Drainage Inserts, removal efficiencies. This specific change was not mentioned on page 7 of the Attachment 1, for Tentative Resolution No. R9-2002-00098, dated April 16, 2002 but is changed on page 20. Bio Clean Environmental Service, Inc. recognizes the vast differences in performances of Drainage Inserts and asks the California Regional Water Quality Control Board, San Diego Region to reconsider the change in Table 3 or revise the Table to allow for an *approved* Drainage Insert. A drainage insert requires no additional land and in the right urban areas, such as downtown, commercial, and densely populated areas, is a very effective Treatment Control BMP. In many situations, the combination of Inlet Devices, along with other Treatment Control BMPs are the best BMP, as no one BMP can treat all pollutants effectively and efficiently.

As we have brought to your attention, the quality and effectiveness of a Drainage Insert can vary vastly, and to place an effective Drainage Insert in the same category as an ineffective Drainage Inserts is an injustice to the effective Drainage Insert. Bio Clean Environmental Service, Inc. wishes it's Suntree Technologies, Inc., Grate Inlet Skimmer Box and Curb Inlet Basket to be evaluated and approved on its own merits. In Lieu of Table 3, page 20, category: Drainage Inserts, we recommend that that each manufacturer provide data, reports and verifiable proof of its rating for various pollution removal rates in each specific category. In the interest of providing fair and accurate evaluation of Drainage Inlets that do provide medium to high ratings, we respectfully request that the rating in this category be changed, until the data provided has been accurately assessed.

A lack of due diligence was used in evaluating the effectiveness of Drainage Inserts in the Model SUSMP, dated February 21, 2002. In light of the information provided it is clear some major discrepancies exist to BMP evaluation in this category. We request, the data provided to you, be reviewed and that Table 3 Category, Drainage Inserts be changed to reflect a broader based evaluation of Drainage Inlets that are not befitting of these ratings. (Bioclean)

Response: The SDRWQCB has not proposed any changes to the BMP effectiveness rankings found in Table 3 of the Model SUSMP. Any change to the effectiveness ranking of Drainage Inserts from previous drafts to the Model SUSMP was made by the Copermittees. Discretion in determining effectiveness rankings for BMPs has been provided to the Copermittees, with SDRWQCB review. The Copermittees may update the Table 3 BMP effectiveness rankings as new data becomes available. It is the SDRWQCB's understanding that the Copermittees will be developing a process through which BMP data may be submitted and reviewed in order to guide Table 3 updates.

4. Comment: Numerous changes to BMP Selection are identified on page 6 of the staff report. The cumulative effect of the changes is to make BMP selection procedures more rigid. These changes are not needed for compliance with the Permit, would usurp local authority, and would exceed the RWQCB's

authority under the Water Code. However, after discussing the concerns that generated these proposed changes with RWQCB staff, the County understands that staff's objectives are simply to ensure (1) that effective BMPs are used where feasible, and (2) that selected BMP reduce pollutant loading to the maximum extent practicable. That is what the Permit requires, and it is what the model SUSMP, read as a whole, required copermittee SUSMPs to achieve. Because there is no disagreement here concerning Permit requirements or basic goals, the County proposes a compromise to address RWQCB staff's concerns about language. We propose adding the following sentence as a new first sentence introducing section VI Stormwater BMP Selection Procedure and section VI.I Identify Pollutants & Conditions of Concern: *"Priority projects are required to implement structural treatment BMP(s) that will be effective."* This sentence should also be added to the notes at the bottom of table 2. The flow chart, tables, and selection processes should be adopted as submitted by the Copermittees in the model SUSMP.

The copermittee submission meets the requirements of the permit. RWQCB staff's proposed changes in these sections of the model SUSMP appear to be premised on a mixture of misunderstanding, and mistrust that copermittees will appropriately exercise their discretion in the selection of BMPs. The model SUSMP is a plan for implementing local programs that meet Permit requirements. It is not a local program, nor is it a BMP selection manual for developers. Staff's concern that the model SUSMP will not require implementation of effective BMPs for some projects is therefore misdirected. The model SUSMP meets Permit requirements for a model SUSMP, and County SUSMP programs will meet Permit requirements for local SUSMP programs. Having incorrectly determined that the model SUSMP does not do enough, staff has gone on to propose changes to the model SUSMP that would define with great specificity the BMPs that must be selected for particular projects. This is an inappropriate intrusion on project-specific decisions that the Permit leaves to the copermittees. (County of San Diego)

Response: The BMP Selection Procedure of the Model SUSMP was originally modified because it did not require implementation of effective BMPs for projects which were not discharging to an impaired water body. While the Model SUSMP did require effective BMPs for projects contributing to a receiving water impairment, the Model SUSMP allowed other projects to implement essentially any BMP available, regardless of effectiveness.

The Model SUSMP contains a table (Table 3) which identifies which BMPs are most effective for various pollutants. However, rather than require that all projects use this table to identify which BMPs will be implemented, the Model SUSMP only requires that this table be utilized by projects discharging to impaired water bodies. Regarding projects which are not discharging to impaired water bodies, the Model SUSMP only states that they "should use Table 3 [...] to aid in selecting the structural treatment BMP(s)." This would allow for projects to immediately choose less effective BMPs for implementation, even when more effective BMPs are available and feasible for the project. Such an approach is not in compliance with the maximum extent practicable (MEP) standard outlined in the Permit. Attachment D of the Permit includes a discussion of the MEP standard by the SWRCB, which states "Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. [...] [I]t would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP based solely on cost, which would be clearly less effective."

Table 3 contains very useful information for pairing the correct BMP with specific pollutants generated by a project. The use of the table should not be limited to only those situations concerning impaired water bodies. The table can be equally useful for protecting non-impaired water bodies, and should be used as such. For this reason, the Model SUSMP was modified to ensure that all priority projects use Table 3 for identifying effective BMPs which will address the project's pollutants of concern.

The original modifications to the Model SUSMP required projects to implement BMPs with a “high” or “medium” removal efficiency for the project’s pollutants of concern, where feasible. While the proposed Model SUSMP will continue to require implementation of effective BMPs, the proposed Model SUSMP has been changed to address Copermittee concerns and provide them with more control over implementation of their local SUSMP programs. Specific detail previously added to the Model SUSMP by the SDRWQCB regarding determination of effective BMPs has been removed, with the understanding that the Model SUSMP is a regional document, and that each Copermittee’s local SUSMP and planning review process will include more detail as to how effective BMPs are identified and implemented.

See changes at Model SUSMP pages 17-18.

VII. Pollutants of Concern Comments

1. Comment: The copermittee submission meets the requirements of the permit. In proposing amendments to ensure that additional pollutants are identified as pollutants of concern, RWQCB staff have (1) confused the broad goals of the state Water Code with the specific requirements of the Permit for SUSMP programs; (2) read "should" as "must"; and (3) read "consider" as a mandatory directive to reach a particular result.

RWQCB staff states "it is also important that the Model SUSMP prevent degradation of receiving waters that are not impaired." (Staff report at page 6.) Staff does not assert directly however that the Permit requires copermittees to implement SUSMP programs in this manner, and in fact the Permit contains no such requirement. It is necessary and appropriate that the Permit be less ambitious than Staff have asserted, because the RWQCB has no authority to mandate that the copermittees take over the RWQCB's responsibilities under the state Water Code. It is also extremely unlikely that the County or other copermittees would not have challenged in court a Permit that purported to require them to entirely prevent the degradation of water by new development.

Staff cites sections F.1.b.2.b.iii and F.1.B.2.e of the Permit to justify changes to the model SUSMP that would require the copermittees to identify additional pollutants as pollutants of concern. However, F.1.B.2.b.iii actually only states that "Identification of pollutants of concern should include at a minimum consideration of [certain factors]." F.1.b.2.e states that the copermittee "shall" develop a procedure to identify pollutants of concern, and states that this procedure shall "consider" certain factors.

The flexibility provided by these provisions is not an accident, because the RWQCB's legal ability to mandate specific methods of compliance is limited by state law. The model SUSMP meets the requirements of the Permit: (1) the copermittees have developed procedures as required by the permit; and (2) those procedures consider all of the factors listed in the Permit. The copermittees cannot now be directed by RWQCB staff to reach particular results based on their consideration of these factors. (County of San Diego)

Response: Section F.1.2.b.e of the Permit requires that the Copermittees develop a procedure (including minimum considerations) to identify pollutants of concern for each new development and significant redevelopment project. The Copermittees and the developer must then follow this procedure for **each** new project. The Model SUSMP, as submitted by the Copermittees, does not meet this requirement. Rather than require each project to consider various factors in identifying pollutants of concern, as required by the Permit, the Model SUSMP has pre-determined what constitutes a pollutant of concern, without regard to threat to water quality. The Model SUSMP states that only impairing pollutants are pollutants of concern, while any other pollutants, despite their potential to impact water quality, need not

be specifically addressed. For example, if an auto shop were discharging to an unimpaired water body, the submitted Model SUSMP would not identify any pollutants of concern for the auto shop, despite the obvious concern for petroleum hydrocarbons leaving such a site. Such a loophole does not meet the requirements of the Permit and does not meet the maximum extent practicable standard. To meet the maximum extent practicable standard, effective BMPs must be implemented. Without identifying pollutants of concern which pose a threat to water quality, it is doubtful that effective BMPs consistent with the maximum extent practicable standard will be implemented.

IX. Conditions of Concern Comments

1. Comment: A further concern that we have is the assumption that if there is an attempt to control downstream erosion impacts from a series of single development sites that there will be an environmental benefit. "Section 2, a. Site Design BMPs" states "Priority projects shall control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion." (See page 21 of 39 Final Model SUSMP.) What is the known environmental benefit of this requirement? We are unaware of any scientific studies that have been done to determine how stream bank erosion can be attributed to a specific site or truly tied to increases in development. When changes in stream bank erosion are seen, how are natural causes separated from man-made causes? There aren't any well-established methods to do that. As a result, this requirement is ill founded and assumes some environmental benefit that is not valid. (BIA)

Response: This comment appears to be targeted at the inclusion of the requirement for priority projects to control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. This requirement is a requirement of the Permit, and has been previously addressed by the SDRWQCB during the adoption of the Permit and the SWRCB in adopting Order WQ 2001-15.

2. Comment: Finally, the Regional Board wants the Co-Permittees to commit to achieving something that would have huge financial consequences. They are committing the Co-Permittees to develop, by 2005, numeric criteria that will "maintain or reduce pre-development downstream erosion." This is what the permit currently states, but by requiring numeric criteria to ensure that this is achieved will require something on the level of matching pre-developed peaks AND durations for all storms. This means that detention alone cannot be relied upon; significant retention will also be necessary to achieve this. To clarify, "detention" is very temporary storage to reduce the peak flow, while "retention" is long term storage (ie., it must infiltrate the soil and/or evaporate).

The Regional Board references similar policies for western Washington State and the Los Angeles Region. There are at least two major differences in the scope of applicability between the L.A. SUSMP, and the San Diego SUSMP. First, unlike the San Diego SUSMP, the L.A. SUSMP exempts streets, roads, and highways. Another major difference is that this policy applies to a very small portion of L.A. County, where natural stream channels still exist (pg. 35, LA SUSMP). Most of these areas are natural because they are rural, and existing land use policies are often in place already, to preserve the rural nature of these areas. Therefore, this policy will not have a serious impact on L.A. County. This is far different from San Diego County, where most projects will either directly or indirectly drain to natural streams. The Regional Board seems to point to the Stormwater Management Manual for Western Washington as evidence that this policy is not unreasonable. However, Western Washington is different in many ways from San Diego. More obvious differences include climate (longer duration, smaller intensity storms),

land availability and cost, topography, and geology. The fact that most of San Diego County is underlain by rock excludes meaningful widespread use of infiltration facilities, even when land is set aside for retention of storm water. (BIA)

Response: As the commentor attests, numeric criteria for the control of downstream erosion would help ensure achievement of the Permit requirement to “maintain or reduce pre-development downstream erosion.” The development of numeric criteria would remove the subjectivity of the Copermittee’s proposal, providing more specific guidance to project proponents on how to protect our region’s streams from undue erosion.

The commentor’s claims of “huge financial consequences” are unfounded. Similar programs have been developed and implemented in Washington and Maryland. Moreover, similar programs are also currently under development in the San Francisco Bay Area, Ventura County, and Los Angeles County. While the commentor cites differences between San Diego County and Los Angeles County, they ignore the similarities between San Diego County and Ventura County. Like San Diego County, Ventura County is a relatively dry area currently undergoing rapid development. It is unclear why such programs can apparently be developed and implemented in other areas of the state, but not in San Diego County.

Regardless, the Copermittees have developed “criteria” in the Model SUSMP for control of downstream erosion by requiring use of a drainage study to address conditions of concern at a project. In this respect, they have met the requirements of the Permit in the strictest sense, even if they may not have met the intent of the Permit. Therefore, the modification of the Model SUSMP requiring development of a numeric criteria over the permit cycle has been removed from the Model SUSMP. However, in relying upon “drainage studies” to protect streams from downstream erosion resulting from new development, the Copermittees must conduct extensive review of these studies to ensure that they are effective in protecting against downstream erosion caused by altered flow rates and velocities. It is expected that the drainage studies would describe any existing and predicted problems such as flooding, erosion, and related water quality problems resulting from the project. The drainage study is also expected to be used to develop measures to address any identified potential erosion and related problems caused by the project. Failure to require development and implementation of effective drainage studies will be a violation of the Permit requirement to “control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat.”

See change at Model SUSMP page 16.

3. *Comment:* We are also concerned that developing the new criteria that RWQCB staff want to require may be technically infeasible. We can find no region that has developed criteria that could be applied in the manner contemplated by RWQCB staff. Development of this kind of criteria is also unnecessary. Priority development projects will require discretionary permits in almost all cases, and in all significant cases those discretionary decisions will be supported by appropriate site-specific hydrological studies. The copermittees are all capable of addressing the implications of peak flow, soil type, vegetative characteristics of the channel, flow characteristics (like sheet flow), and other relevant factors on downstream erosion. (County of San Diego, City of Poway)

Response: Developing numeric criteria to control downstream erosion is not technically infeasible. Numeric criteria have been developed in Washington and Maryland. Moreover, similar programs are also currently under development in the Bay Area, Ventura County, and Los Angeles County. A description of the type of study being conducted in Ventura County is provided below:

A field study will be conducted to provide direct measurements of stream channel cross sections, composition and size distribution of bed and bank materials, and estimated flow rates. Measurements will take place at field sites located upstream and downstream from detention basins, downstream from developments without detention basins, and in undeveloped areas. Field data, as well as background data, will be used to evaluate stream channel changes and provide “ground truthed” information for model input and output parameters.

Continuous computer modeling will then be used to simulate flow conditions in the stream for a representative development. Potential models appropriate for this purpose include the storm water management model (SWMM) and the hydrologic simulation program Fortran (HSPF), among several others. Results of the modeling will be interpreted to estimate erosion potential. The most effective means (numeric criteria) for controlling erosion can then be identified.

Despite the feasibility of developing numeric criteria to protect against downstream erosion, the Copermittees have developed “criteria” in the Model SUSMP for control of downstream erosion by requiring use of a drainage study to address conditions of concern at a project. In this respect, they have met the requirements of the Permit in the strictest sense, even if they may not have met the intent of the Permit. Therefore, the modification of the Model SUSMP requiring development of a numeric criteria over the permit cycle has been removed from the Model SUSMP. However, in relying upon “drainage studies” to protect streams from downstream erosion resulting from new development, the Copermittees must conduct extensive review of these studies to ensure that they are effective in protecting against downstream erosion caused by altered flow rates and velocities. It is expected that the drainage studies would describe any existing and predicted problems such as flooding, erosion, and related water quality problems resulting from the project. The drainage study is also expected to be used to develop measures to address any identified potential erosion and related problems caused by the project. Failure to require development and implementation of effective drainage studies will be a violation of the Permit requirement to “control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat.”

See change at Model SUSMP page 16.

4. Comment: RWQCB staff propose to require that "peak flow rate" and "flow velocity" be listed as "characteristics that must be computed" in drainage studies. The Permit does not require the copermittees to require drainage studies, or to compute any specific characteristics of flow at a project. It is a discretionary copermittee decision to base this program in part on drainage studies. Therefore, the Permit does not required model SUSMP language specifying that specific values must be computed in a drainage study. (County of San Diego)

Response: The Permit requires the control of peak flow rates and velocities to maintain/reduce downstream erosion. Peak flow rates and flow velocity need to be quantified in order to determine the extent to which they need to be controlled. The addition of these parameters to the Identify Conditions of Concern section will remain.

5. Comment: Page 8 of the staff report proposes to add an additional paragraph to the section "Identify Conditions of Concern" that would require the copermittees to develop "numeric" criteria for erosion control by 2005, and to apply those criteria thereafter. This proposed change is not acceptable to the County. The provisions of the model SUSMP addressing erosion control should not be changed. The County contested RWQCB staff's assertion of authority to mandate erosion prevention programs when the

Permit was proposed. After considering the comments of the County and others, the final Permit provided more flexibility in the design and implementation of these programs than the proposed permit had provided. Based on those changes, the County concluded that it could modify its existing CEQA and other project review procedures to better address the potential for projects to have an adverse environmental impact by causing erosion, without elevating this concern unduly in comparison to flood management, habitat preservation, and other relevant environmental concerns. *The County only accepted this illegal Permit requirement because as modified, it was workable.*

County staff and copermittee representatives have had an opportunity to discuss this proposed change with RWQCB staff, and we were told that the change was appropriate in part because staff always intended to require numeric criteria, and had so provided in the Tentative Permit. That argument for modifying the actual Permit though the model SUSMP is inappropriate, and absolutely unacceptable to the County. The RWQCB and its staff may not impose indirectly through the model SUSMP provisions of the Tentative Order that were deleted or modified in response to public comments.

The RWQCB should have no doubt that what staff has proposed here would be a significant and burdensome Permit modification. The very fact that staff propose to allow the copermittees until 2005 to develop these new criteria is itself proof that this is not a previously imposed SUSMP requirement, and is not a requirement that could be easily met.

The copermittee submission meets the requirements of the permit. The Permit language quoted by staff require the copermittees to develop criteria to ensure erosion outcomes and habitat protection, but it does not require development of numeric criteria. Staff obviously recognizes that it is proposing a new and very difficult requirement, because staff also proposes that this requirement be met in 2005. All of the SUSMP requirements actually contained within the Permit must be met much more promptly. Staff appears to argue that numeric criteria are required by implication, because (staff asserts) they are "necessary to ensure that pertinent changes in hydrologic condition are addressed in an effective manner." This crucial statement is not supported by any record or any analysis, or by actual practice in California or elsewhere, or by the technical experts employed by the County. Moreover, even if the statement were correct and were supported by an adequate record, it would not change the legal fact that the Permit as enacted does not require the development of numeric criteria. (County of San Diego)

Response: The Copermittees have developed "criteria" in the Model SUSMP for control of downstream erosion by requiring use of a drainage study to address conditions of concern at a project. In this respect, they have met the requirements of the Permit in the strictest sense, even if they may not have met the intent of the Permit. Therefore, the modification of the Model SUSMP requiring development of a numeric criteria over the permit cycle has been removed from the Model SUSMP. However, in relying upon "drainage studies" to protect streams from downstream erosion resulting from new development, the Copermittees must conduct extensive review of these studies to ensure that they are effective in protecting against downstream erosion caused by altered flow rates and velocities. It is expected that the drainage studies would describe any existing and predicted problems such as flooding, erosion, and related water quality problems resulting from project flows. The drainage study is also expected to be used to develop measures to address any identified potential erosion and related problems caused by the project. Failure to require development and implementation of effective drainage studies will be a violation of the Permit requirement to "control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat."

See change at Model SUSMP page 16.

X. Source Control BMPs Comments

1. Comment: Page 23, Section VI.2. b, Step S Design Trash Storage Areas to Reduce Pollution Introduction - The copermitttee submission meets the requirements of the permit. The Permit does not require that BMP specifications be included in the model SUSMP. The Permit also does not give RWQCB staff the authority to impose on copermitttees its views on the proper design for any BMP.

Page 25, Section VI. 2. b, Step Page d Maintenance Bays - The copermitttee submission meets the requirements of the permit. The Permit does not require that BMP specifications be included in the model SUSMP. The Permit also does not give RWQCB staff the authority to impose on copermitttees its views on the proper design for any BMP.

Page 25, Section VI.2.b, Step Page 7e Vehicle Wash Areas - The copermitttee submission meets the requirements of the permit. The Permit does not require that BMP specifications be included in the model SUSMP. The Permit also does not give RWQCB staff the authority to impose on copermitttees its views on the proper design for any BMP.

Page 25, Section VI. 2.b, Step Page 7.g Equipment Wash Areas - The copermitttee submission meets the requirements of the permit. The Permit does not require that BMP specifications be included in the model SUSMP. The Permit also does not give RWQCB staff the authority to impose on copermitttees its views on the proper design for any BMP. (County of San Diego)

Response: These sections of the Model SUSMP were taken from the Los Angeles Model SUSMP and modified by the Copermitttees. These modifications do not meet MEP and may allow for illicit discharges through selection of inadequate BMPs. Moreover, the original wording of the Los Angeles Model SUSMP was upheld by the SWRCB in Order WQ 2000-11. Regional Board staff modifications to the Model SUSMP will remain.

XI. Miscellaneous Comments

1. Comment: How will the environmental benefit of this regulation be measured? (BIA)

Response: The environmental benefit of the Permit requirements as a whole will be determined through the implementation and analysis of the Copermitttees' extensive monitoring program. The Copermitttees' program assessments will also be used.

2. Comment: If the environmental benefits do not out weigh the cost, will the regulation be rewritten? (BIA)

Response: Information and data collected during this permit cycle will used in the development of the next permit in 2005.

3. *Comment:* The local jurisdictions considered comments submitted in a December 10, 2001 letter, however did not agree with all of them. The staff report states the following concerning the rejection of comments, "Therefore, the Model SUSMP Submitted by the Copermitees is not in compliance with the Permit," After reviewing the permit we could find no requirement that staff comments on an intermediate draft document carried this kind of weight. (ASLA)

Response: The comments made by the SDRWQCB in its December 10, 2001 letter pointed out areas where the Model SUSMP was not in compliance with the Permit and needed to be modified. Since the Model SUSMP did not address these comments and was not modified in many areas, it was found to be out of compliance with the Permit.

4. *Comment:* Page 25, Section VI2.b, Step 7.i Roadways - The copermitee submission meets the requirements of the permit. This section of the model SUSMP need not be consistent with other inappropriate model SUSMP modifications that RWQCB staff has proposed. (County of San Diego)

Response: This minor modification was made in order to make the Model SUSMP internally consistent.

5. *Comment:* Page 28, Section VI. 2.c, Step 8 Flow - The copermitee submission meets the requirements of the permit. This sentence of the model SUSMP already refers to "hourly rainfall." The change proposed by staff is therefore redundant, and not necessary for compliance with the Permit. (County of San Diego)

Response: The Regional Board staff modifications were made as a simple clarification to the three flow options in this section. The first option of the submitted Model SUSMP contained the subject language; for consistency, the subject language was added to the other two options.
